

BRIEFER ARTICLES

WILLIAM GILSON FARLOW

(WITH PORTRAIT)

With Dr. FARLOW, whose death occurred on June 3, 1919, after a short illness, there passes not only a unique personality, but one whose preeminence in his special field was such that to no one else could the title of cryptogamic botanist, in the broader sense, be so justly applied. Apart from his extensive familiarity with other branches of botany, it is doubtful if anyone has ever approached him in his knowledge of the non-vascular plants as a whole, a knowledge so comprehensive as well as so detailed, that in matters relating to most of the larger groups his opinion was rightly regarded as that of an expert.

Gifted with an extraordinarily retentive memory, exceptional ability, keen discernment, and sound judgment; appreciating the necessity for a wide and thorough training for his work; possessing, also, sufficient means with which to avail himself of opportunities, many of which were such as come only to the pioneer, he was able to accumulate books, collections, and other material needs for the execution of his purposes. His equipment thus included intellectual and material factors which combined to make him one of the foremost figures in the botanical world.

Dr. FARLOW's interest in botany had already developed during his undergraduate days at Harvard, and his natural fondness for the subject was fostered and developed by his contact with ASA GRAY, by whose



advice, after graduation, he studied medicine in preparation for a scientific career. Receiving his Doctor's degree in 1870, he became GRAY's assistant, and had the privilege of teaching and studying with him for two years. Although, during this association, he gained a comprehensive knowledge of the vascular plants, his preference for the non-vascular types, and especially the algae, was already apparent, since it is with the latter that his first two papers, "Cuban seaweeds" (1871) and "List of the seaweeds or marine algae of the south coast of New England" (1871-1872), are concerned.

GRAY's interests, being primarily systematic, were naturally impressed on Dr. FARLOW, and the former evidently contemplated the conversion of his pupil into a collaborator who might in a measure do for the lower cryptogams what he had himself done for the flowering plants, even to the point of preparing a manual. Although no portion of this program was carried out, the preparation of a textbook of cryptogamic botany was in Dr. FARLOW's mind more or less constantly, until the idea was finally abandoned in the early nineties. It was partly with this in view that he was advised by GRAY, after serving two years as his assistant, to visit Europe, come in personal relations with European botanists, acquire a knowledge of their methods of working and of teaching, and above all to learn as much as possible of the lower forms, especially the fungi and lichens. He therefore sailed for Liverpool in June 1872, and went first to Scandinavia, where he saw, among others, the elder FRIES, as well as ARESCHOUG and AGARDH and their herbaria. He continued his journey as far as St. Petersburg, where he desired to see the algae in the Ruprecht Herbarium. Although he also traveled in Germany, Switzerland, France, Italy, and England, meeting many well known botanists, he passed most of his time at Strassburg in DEBARY's laboratory, spending also some weeks in an intensive study of the lichens with Dr. J. MULLER at Geneva, and of the algae with BORNET and THURET at Antibes. DEBARY was then professor of botany and regent of the German University, which had replaced the French Académie after the close of the Franco-Prussian War, and was reputed to know more about the fungi, their morphology and development, than anyone else in the world. Dr. FARLOW was thus able to fill this, the most serious gap in his equipment, and to acquire, among other things, a good foundation in general plant anatomy. Here he came in contact with SCHIMPER, then an old man and the most distinguished member of the scientific faculty, Graf SOLMS, recently appointed *ausserordentlich* professor, and various students attracted by DEBARY's courses: STAHL,

ROSTAFINSKI, SOROKIN, GILKINET, LINDSTEDT, and others. He was strongly influenced by the personality of DEBARY himself, his wide knowledge, ability, earnestness, and high ideals of care and accuracy in scientific work. The training which he thus acquired served as a fitting complement to that which he received from ASA GRAY, the impress of whose systematic predilections was thus tempered by DEBARY'S very different point of view. Work of a taxonomic or even of a general nature was not encouraged in the latter's laboratory, and he was regarded by Dr. FARLOW as somewhat narrow in his conception of the scope and extent of the preparation desirable in the preliminary training of a botanist. He was not himself, however, restricted to a special topic until more than a year after he entered the laboratory, when DEBARY, having observed the vegetative development of a fern sporophyte from the prothallus, turned the subject over to him for investigation. The resultant paper, on "An asexual growth from the prothallus of *Pteris cretica*," published in the *Botanische Zeitung* and elsewhere, attracted wide attention and interest, and, although it was at first attacked from all sides, rendered his name familiar to botanists everywhere.

His reputation was thus well established when he returned to America in the summer of 1874, and was appointed to an assistant professorship at Harvard, the first special provision in this country for instruction in cryptogamic botany. For some years he was stationed at the Bussey Institution, where his work dealt largely with the economic aspects of mycology, and where he may be said to have laid the foundations of American phytopathology. During this period of 5 years his published papers on fungi were largely devoted to destructive parasites, such as the black knot, grape mildew, onion smut, etc., although he did not neglect the marine algae, and published several articles on the algal impurities of water supplies.

In 1879 he was transferred to Cambridge as professor of cryptogamic botany, a position which he continued to occupy until his death, after a service on the Harvard faculty of 45 years. He was thus able to devote himself to the Farlow Herbarium, the nucleus of which was the well known Curtis Herbarium, purchased during his absence in Europe, and of his unrivaled library of books, papers, and journals relating to cryptogamic botany; the development of instruction in different branches of the subject, as well as of productive investigation on his own part and that of his students.

In 1883 he instituted the numbered series of "Contributions from the Cryptogamic Laboratory of Harvard University," which, up to the

time when he retired from active teaching in 1896, included the titles of some 40 papers, which, with the exception of the four first numbers written by himself, represent original work accomplished by his students. Among the latter were included B. D. HALSTED, WILLIAM TRELEASE, J. E. HUMPHREYS, W. A. SETCHELL, K. MIYABE, H. M. RICHARDS, and other well known names of American botanists. His own publications during this period were numerous, and included, for example, "Monograph of the Gymnosporangia," "Marine algae of New England," "Host index of fungi," etc. It is greatly to be regretted that his *magnum opus*, on selected species of fleshy fungi, for which an edition of very beautiful plates was printed long before his death, has been left uncompleted.

Although he continued a member of the Harvard faculty until his death, he withdrew from teaching in the year just mentioned, giving attention occasionally to advanced students in whose work he felt a special interest, devoting himself chiefly to the care and increase of the herbarium and of his library, as well as to the supervision of the extensive "Bibliographical index of American fungi," the first part of which, prepared in collaboration with A. B. SEYMOUR, was published by the Carnegie Institution in 1905. At the same time he kept up his botanical reading, about which he was hyperconscientious, and which was varied and extensive, being by no means limited to matters relating to cryptogams alone; while he also carried on a voluminous correspondence, sparing neither time nor trouble to assist those in search of advice or information as to identities, synonymy, or literature.

Throughout his life Dr. FARLOW was an indefatigable collector, and his activity of body and keen eyesight, which were little impaired by age, combined with his long experience and wide and exact knowledge, enabled him to detect a host of new, rare, or interesting forms. His annoyance at encountering unrecognizable, and in numberless instances undoubtedly new, forms, was often very amusing. He had so little patience with species makers that he himself described but a very small percentage of the novelties that came in his way. Of those who make a profession of this type of botanical activity he once said to his class, "If a difference can be *imagined*, it is a new species; if one can be *seen*, it is a new genus." A number of new genera and species were none the less named in his honor, of which he laughingly asserted that "they were almost all bad."

Dr. FARLOW's attainments, his rare ability and learning, commanded the respect of all who came in contact with him, and were given recogni-

tion by the bestowal of honorary degrees (LL.D. by Harvard, Wisconsin, and Glasgow, and Ph.D. by Upsala), as well as by his election to membership in the National and Paris Academies of Science, the American Philosophical Society, the American Academy of Arts and Sciences, the Linnaean Society of London, and various other scientific bodies in this country and abroad. His good judgment, keen sense of humor, originality, and faculty for interesting presentation never failed to render any public deliverance of his a memorable event.

There are few that have been brought into close relations with him as students, or in scientific work, whose standards and ideals he did not fundamentally influence; while those who had experienced his unfailing kindness, thoughtfulness, and sympathetic interest not only regarded him with the honor and respect due to his character and attainments, but with a personal feeling of obligation and affection.—ROLAND THAXTER, *Harvard University*.